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10/669,031	09/23/2003	Masaya Okita	Soyu C-6B	1821

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EXAMINER	
PIZIALI, JEFFREY J	

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/669,031	OKITA, MASAYA	
	Examiner	Art Unit	
	Jeff Piziali	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,4,7,10,12,15,17 and 20-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,4,7,10,12,15,17 and 20-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/115,018.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/115,018, filed on 14 July 1998.

Oath/Declaration

2. The 'Response' submitted 12 December 2005 amends paragraph [0001] of the instant specification to state that the instant application is a continuation-in-part of Application No. 09/801,098. A supplemental oath or declaration is required under 37 CFR 1.67. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in

the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claim 17 recites, "the second time period has a greater duration than the first time period" (see lines 3-4). However, the specification does not disclose the subject matter of any one time period having a greater (or shorter) duration than any other time period.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-19 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by the applicant's own admission of prior art (see Figs. 2 & 3; Paragraphs 2-11; Paragraphs 19-20; Paragraphs 26-28; and Paragraphs 33-35 -- wherein Fig. 2 refers to the illustration as originally submitted in Application No. 09/801,098, aka US Patent Application Publication US 2001/0052885 A1).

7. Claims 3, 4, 7, 10, 12, 17, and 20-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al. (US 5,594,464). [Note that claim order has been rearranged below to better reflect claim dependencies.]

Regarding claim 20, Tanaka discloses a method for driving a nematic liquid crystal in liquid crystal display device comprising a nematic liquid crystal (see the Abstract), two electrodes [Fig. 28; C & S] sandwiching the nematic liquid crystal (see Column 21, Lines 10-41) and two polarizing plates sandwiching the two electrodes (see Column 10, Lines 19-22), consisting of the steps of: applying a first voltage [Fig. 2, 202] corresponding to image data to the liquid crystal during a first time period [i.e. one signal period] in a unit period [Fig.2; t'1, t0, t1]; and applying a second voltage [Fig.2; 201] that does not correspond to image data to the liquid crystal during a second time period [Fig.2; t'1 - (one signal period), t0 - (one signal period), t1 - (one signal period)] in the unit period, wherein the unit period consists of the first time period and the second time period, and the optical transmittance [Fig. 2; 204] of the nematic liquid crystal changes from an initial level corresponding to the second voltage to a level corresponding to image data during the first time period and changes from the level corresponding to image data to the initial level corresponding to the second voltage during the second time period (see Column 10, Lines 26-67).

Regarding claim 3, Tanaka discloses the second voltage applied in the second time period of the unit period erases an image on the panel during the second time period (see Fig. 2; Column 10, Lines 26-67).

Regarding claim 4, Tanaka discloses erasure of the image displayed on the panel is effected by driving the liquid crystal to display black on the panel (see Figure 2; Column 10, Lines 35-38).

Regarding claim 7, this claim is rejected by the reasoning applied in the above rejection of claim 4; furthermore, Tanaka discloses the second voltage is zero volts (see Fig. 2; Column 10, Lines 52-59).

Regarding claim 10, this claim is rejected by the reasoning applied in the above rejection of claim 4; furthermore, Tanaka discloses the voltage applied in the second time period of the unit period erases an image on the panel by darkening the TFT liquid crystal panel to substantially black during the second time period (see Figure 2; Column 10, Lines 35-38).

Regarding claim 12, Tanaka discloses the matrix liquid crystal panel is an active matrix liquid crystal panel (see Column 1, Lines 25-30).

Regarding claim 17, Tanaka discloses the second time period has a greater duration than the first time period, and the first and second time periods, which do not overlap, combined equal the entirety for the unit period (see Figure 2; Column 10, Lines 26-67).

Regarding claim 21, Tanaka discloses the liquid crystal display device is a TFT liquid crystal display device (see Column 1, Lines 10-41).

Regarding claim 22, this claim is rejected by the reasoning applied in the above rejection of claim 20; furthermore, Tanaka discloses an image display method for a liquid crystal display device including a matrix liquid crystal panel using a nematic liquid crystal, consisting of the steps of: applying a first absolute voltage [Fig. 2, 202] corresponding to image data to the liquid crystal during a first time period [i.e. one signal period] a unit period [Fig.2; t'1, t0, t1]; and applying second absolute voltage [Fig.2; 201] having a predetermined potential and that does not correspond to image data to the liquid crystal in a second time zone [Fig.2; t'1 - (one signal period), t0 - (one signal period), t1 - (one signal period)] different from the first time zone in the unit period (see Column 10, Lines 26-67).

Regarding claim 23, this claim is rejected by the reasoning applied in the above rejection of claims 20 and 22 (see Column 10, Lines 26-67).

Regarding claim 24, Tanaka discloses the first absolute voltage consists of a first positive voltage and a first negative voltage and the sum of the first positive voltage and the first negative voltage in the unit period is zero volts (see Fig. 2; Column 10, Lines 26-67).

Regarding claim 25, Tanaka discloses the level corresponding to the second voltage is white or black (see Figure 2; Column 10, Lines 35-38).

Regarding claim 26, this claim is rejected by the reasoning applied in the above rejection of claims 20, 22, and 24.

Regarding claim 27, Tanaka discloses the second absolute voltage applied in the second time period of the unit period erases on image on the panel during the second time period (see Figure 2; Column 10, Lines 35-38).

Regarding claim 28, Tanaka discloses erasure of the image displayed on the panel is effected by driving the liquid crystal to display black on the panel (see Figure 2; Column 10, Lines 35-38).

Regarding claim 29, this claim is rejected by the reasoning applied in the above rejection of claim 4; furthermore, Tanaka discloses the liquid crystal display device is normally black and the second absolute voltage is zero volts (see Fig. 2; Column 10, Lines 52-59).

Regarding claim 30, Tanaka discloses the liquid crystal display device is a TFT liquid crystal display device including a plurality of pixels (see Column 1, Lines 10-41).

Regarding claim 31, Tanaka discloses the level corresponding to the second absolute voltage is white or black (see Figure 2; Column 10, Lines 35-38).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 5,594,464).

Regarding claim 15, Tanaka does not expressly disclose the unit period is less than or equal to 8 milliseconds (see Figure 2; Column 10, Lines 52-59). However, the examiner takes official notice that it was commonly known and understood in art at the time of invention to set such a unit period to 8 milliseconds or less. Thus it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to set Tanaka's unit period to less than or equal to 8 milliseconds, so as to provide quick enough response times than display viewing is made comfortable for users.

Response to Arguments

10. Applicant's arguments filed 12 December 2005 have been fully considered but they are not persuasive. The applicant contends support for claim 17's subject matter of the second time period having a greater duration than the first time period, "can be found in Figure 1 of the present application in which the first time period in which 'V1' and '-V1' is less than the time period in which '0V' is applied" (see the last paragraph on page 8 of the Amendment filed 12 December 2005). However, the examiner respectfully disagrees. Nowhere in the written

disclosure are the two time period durations ever explicitly compared. None of the provided illustrations (including Figure 1) are ever acknowledged as being drawn to scale. Furthermore, Figure 1 neglects to anywhere visually distinguish a "first time period duration" from a "second time period duration." Due to all these commingling factors, one having ordinary skill in the art would have no reasonable way of necessarily deducing that the instant invention is limited to the second time period having a greater duration than the first time period, as claimed.

The applicant further contends, "One of ordinary skill in the art would clearly understand that Figure 2 in application Serial No. 09/801,098 is a duplicate of Figure 1 and was submitted in error since there is no disclosure in this application which supports Figure 2 as being 'prior art'" (see the second paragraph on page 10 of the Amendment filed 12 December 2005). However, again the examiner must respectfully disagree. Figure 2 is clearly labeled as "Prior Art" in Serial No. 09/801,098 (as well as Patent Application Publication US 2001/0052885 A1, published 20 December 2001). While the applicant may argue now in retrospect that the illustrated waveforms of Figure 2 were submitted in error; such arguments are going to hold little sway over anyone else skilled in the art, who upon seeing published Figure 2 labeled as "Prior Art" is going to naturally and immediately assume such a "Prior Art" label is accurate. If Figure 2 was indeed erroneously submitted as prior art, the examiner can appreciate the Applicant's dilemma of now sculpting distinguishing claim language. However, the examiner cannot simply ignore that fact that Figure 2 is on the official patent record as constituting "Prior Art."

The applicant also contends, "The presently claimed invention is clearly patentably distinguishable over Tanaka et al [US 5,594,464] since it requires that a voltage be applied to bring about Frederick's transition before any voltage corresponding to image data is applied" (see

the second paragraph on page 11 of the Amendment filed 12 December 2005). However, once again the examiner must respectfully disagree -- mainly because this line of argument would appear to be a moot point. In particular, the examiner notes that not only are the pending claims silent on the subject matter of bringing about "Frederick's transition," but the entire instant application is devoid of any references to "Frederick's transition" at all.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J.P.
24 February 2006

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